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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,281	11/15/2001	Tomasz Janczak	42390P12526	3698

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EXAMINER

MEHRA, INDER P

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/991,281

Applicant(s)

JANCZAK, TOMASZ

Examiner

Inder P. Mehra

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 4, 12 and 14-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application dated: 10/24/05. Claims 1-20 are pending.

Claim Objections

2. Claim 6 is objected to because of the following informalities:

Claim 6 recites "wherein determining the binary number". It should be prefixed by "the", because it is preceded by the same limitation in claim 1 in line 3. Same problem exists in claim 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites following limitations, which either lack antecedent basis or have no antecedent basis:

- "the binary number" in line 3. There is no antecedent basis.

Appropriate action/clarification be made.

Priority

5. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. [1] as follows:

The later-filed application must be an application for a patent for an invention which is **also disclosed in the prior application** (the parent or original nonprovisional application or **provisional application**). The disclosure of the invention in the parent application and in the later-filed application **must be sufficient to comply with the requirements of the first paragraph** of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/307,542, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. See 37 CFR § 1.78 (a) (4).

Under 35 U.S.C. 119(e), the written description and drawing(s) (if any) of the provisional application must adequately support and enable the subject matter claimed in the nonprovisional application that claims the benefit of the provisional application, see MPEP 201.11, "DISCLOSURE REQUIREMENT".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2666

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Narayanna et al** (US Patent Application Publication No. 2002/0118683), hereinafter **Narayanna** in view of **Haartsen et al** (US Patent Application Publication 2002/0126692), hereinafter, **Haartsen**.

For claims 1 and 9 Narayanna discloses “A method”, refer to paragraph 0003, comprising:

- selecting a packet; (Each scheduler 320A or 320B may prioritize packets by selecting the most eligible packet stored in its associated buffer 318, refer to paragraph 0053);i
- determining a binary number corresponding to the priority of the selected packet, wherein the binary number comprises N digits, refer to paragraphs 75-79;

Narayana does not disclose expressly the following limitation, which is disclosed by Haartsen, as follows:

- contending for packet transmission, wherein the period of contention lasts N slot intervals, refer to paragraphs 0015,0039, and 0042.

It would have been obvious to the person of ordinary skill in the art at the time the invention to use the capability of “contending for packet transmission, wherein the period of contention lasts N slot intervals”, as taught by Haartsen. The capability can be implemented by the scheduler as taught by Narayana., and which can incorporate the capability of resolution of contention, as taught by Haartsen. . The motivation for doing so is to avoid contention through prioritization.

Art Unit: 2666

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Narayanna et al**, hereinafter Narayanna, in view of **Haartsen et al**, hereinafter, Haartsen, as above, further, in view of **Widjaja et al** (US Patent No. 5, 440, 553), hereinafter, Widjaja.

For claim 5, Narayanna and Haartsen both disclose all the limitations of subject matter, with the exception of the following limitation, which is disclosed by Widjaja, as follows:

- wherein selecting a packet comprises selecting a highest priority packet that is ready to be transmitted., (refer to “Among the packets destined for output port n, the trap network 70 selects the packet of highest priority, and if there is more than one such packet, it picks the packet having the lowest age value, refer to col. 6 lines 30-33);

It would have been obvious to the person of ordinary skill in the art at the time the invention to use the capability of “selecting a packet comprises selecting a highest priority packet that is ready to be transmitted”. The capability can be implemented by the scheduler as taught by Narayana., and which can incorporate the capability of resolution of contention, as taught by Widjaja. The motivation for doing so is to avoid contention through prioritization.

9. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Narayanna et al**, hereinafter Narayanna, in view of **Haartsen et al**, hereinafter, Haartsen, as above, further, in view of **Collins et al** (US Patent No. 6,791,990), hereinafter, Collins.

For claims 6 and 13, Narayanna and Haartsen both disclose all the limitations of subject matter, with the exception of the following limitation, which is disclosed by Collins, as follows:

Art Unit: 2666

- wherein determining the binary number corresponding to the priority of the selected packet comprises determining a two digit binary number (refer to col. 6 lines 24-53).

It would have been obvious to the person of ordinary skill in the art at the time the invention to use the capability of “determining the binary number corresponding to the priority of the selected packet comprises determining a two digit binary number”. The capability can be implemented by the scheduler as taught by Collins. The motivation for doing so is to avoid contention through prioritization.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Narayanna et al**, hereinafter Narayanna, in view of **Haartsen et al**, hereinafter, Haartsen, as above, further, in view of **Dimmick** (US Patent No. 4,470,112), hereinafter, Dimmick.

For claim 7, Narayanna and Haartsen both disclose all the limitations of subject matter, with the exception of the following limitation, which is disclosed by Dimmick, as follows:

- wherein determining the binary number corresponding to the priority of the selected packet comprises determining a three digit binary number, refer to abstract;

It would have been obvious to the person of ordinary skill in the art at the time the invention to use the capability of “determining the binary number corresponding to the priority of the selected packet comprises determining a three digit binary number”. The capability can be implemented by the scheduler as taught by Dimmick. The motivation for doing so is to avoid contention through prioritization.

Allowable Subject Matter

11. Claims 17-20 are allowed.
12. Claims 4, 12, 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. Claims 2-3, 8, 10-11, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

14. Applicant's arguments filed 10/24/05 have been fully considered but they are not persuasive.

Applicant argues, "Paragraph 0053 of Haartsen is directed to staggering the priority slots of a channel so that time critical services can be multiplexed onto the channel. Paragraph 0056 briefly discusses "a contention problem wherein a priority slot of another service . . . occurs) while a packet transmission of the previous service is still in progress, or . . . [occurs] at the same time of another priority slot." In particular, paragraph 0056 suggests that the contention must be resolved by granting the right to the owner of the leading priority slot . . . [and where] priority slots coincide exactly, the contention may be resolved by giving the service originating from the lowest address to take precedence."

Art Unit: 2666

Further, applicant argues, "Paragraphs 0053 and 0056 do not, however, teach or suggest, "contending for packet transmission, wherein a period of contention lasts N slots intervals," as recited in claims 1 and 9.

In response, it is stated that Haartsen (US Patent Application No. 2003/0035396), filed 3/12/01, discloses, "Such a situation inevitably will lead to a contention problem wherein a priority slot of another service will either occur **while a packet transmission of the previous service is still in progress, or may occur at the same time of another priority slot** **Contention problems (contention lasts "N slot intervals")**", refer to paragraph 0056.

Further, Haartsen (US Patent Application No. 2003/0126692) discloses, refer to paragraphs 0015 and 0039, "**contention resolution scheme to resolve contention contests when the reserved slot of two or more communication units coincide (contention lasts "N slot intervals). Communication units may be assigned priority levels, and contention contests may be resolved by awarding access to the communication channel to the higher priority communication unit" (contend for packet transmission),**

Further, Haartsen (US Patent Application No. 2003/0126692) discloses, refer to paragraphs 0039, "If multiple units are assigned reserved slots, the slots preferably are offset in time as shown in FIG. 4 to avoid contention over access to the channel. Time staggering is effective in preventing contention (contend for packet transmission) in cases where the reserved slot interval $T_{sub.p}$ is the same for both units (i.e., $T_{sub.p,A}=T_{sub.p,B}$) or when the reserved slot interval of one unit (i.e., $T_{sub.p,A}$) is an integer multiple of another unit (i.e., $T_{sub.p,B}$) **(contention lasts "N slot intervals")**.

Art Unit: 2666

Further, Haartsen (US Patent Application No. 2003/0126692) discloses, refer to paragraphs 0042, "a contention resolution scheme for use when reserved slots for two or more different communication units fall on the same time slot. This may occur, for example, when communication units are assigned reserved slot intervals" (contention lasts "N slot intervals).

In light of above explanation, arguments by applicant are not persuasive.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DANIG TON
PRIMARY EXAMINER

Inder Pal Mehra 1/22/06
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Examiner
Art Unit 2666